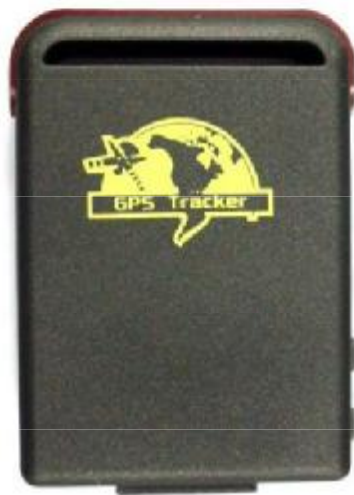


# **GSM/GPRS/GPS TRACKER USER MANUAL**



## **Preface**

Thank you for purchasing the GPS tracker. This manual shows how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Please note that specification and information are subject to changes without prior notice in this manual. Any change will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.

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## 1 Summary

Working Based on existing GSM/GPRS network and GPS satellites, this product can locate and monitor any remote targets by SMS or GPRS.

## 2 Applications

- | Vehicle rental / Fleet management etc
- | Protect child / the old / the disabled / pet etc
- | Provide peace-of-mind for businessmen
- | Manage personnel
- | Track criminals secretly

## 3 Hardware Description

### 3.1 Front face



### 3.2ce Rear face



### 3.3 Side face



### 3.4 Bottom face



### 3.5 Interior



### 4 Specs.

Content	Specs.
Dim.	64mm x 46mm x 17mm(1.8''*2.5''*0.65'')
Weight	50g
Network	GSM/GPRS
Band	850/1800/1900Mhz or 900/1800/1900Mhz or 850/900/1800/1900
GPS chip	SIRF3 chip
GSM/GPRS module	Simcom300 or Simcom340
GPS sensitivity	-159dBm
GPS accuracy	5m
Time To First Fix	Cold status 45s Warm status 35s Hot status 1s
Car charger	12—24V input 5V output
Wall charger	110—220V input 5V output
Battery	Chargeable changeable 3.7V 800mAh Li-ion battery
Standby	48hours
Storage Temp.	-40°C to +85°C
Operation Temp.	-20°C to +55°C
Humidity	5%--95% non-condensing

## 5 Usage

### 5.1 SIM card installation

Make sure that there is no **call transfer** and **call display is on**, and **PIN code** off. The SMS message must in Text format, can't be identified for PDU format.

#### Steps:

- 1 Open the rear cover, and pick out the battery.
- 2 Push the foil along and turn it left.



- 3 Put the SIM card into the holder, and turn the foil right and fasten it in place.



### 5.2 Battery and Charger

Do charge the battery to capacity in 8 -12 hours for first use. Please use the battery and charger provided by the manufacturer. This unit adopts built-in Li-ion battery, and full battery will support around 48 hours use on end. After first use, the battery can be charged fully in 3-5hours.

#### Cautions:

- a: For it's Li-ion battery, which contains harmful chemicals and may burst, please don't bump, puncture it violently and keep it off fire.
- b: Please charge the battery in time to keep it working normally.

### 5.3 Startup

- l Put the SIM card and battery in place.
- l Turn on the unit outdoors by pressing the “on/off” button until the indicator is on.
- l For first use, please initialize the unit and restore it to default setting.( please refer to 5.4 for instruction.)

- I In 10 or 40seconds, the unit will begin to work and acquire the GSM signals as well as the GPS signals. The indicator will keep flashing every 4 seconds when the unit has received the signals, otherwise it will keep on.
- I When this unit receives GPS signals normally, you can use it and do all the following settings.

## 5.4 Initialization

Send “**begin+password**” in SMS to the unit, it will reply “**begin ok**” and initialize all the settings. (default password is 123456)

## 5.5 Change the password

Send SMS "**password+old password+#+new password**" to change the password.

Remark:

5.5.1 Be sure keep the new password in mind, you have to upload the software to restore the original setting in case of losing the new password.

5.5.2 Make sure the new password is in 6 digits, or else the tracker can not recognize the password.

5.5.3 you can Send "**resumepassword**" to the tracker, to restore the original setting in case of losing the new password,and it will reply resume password,pass word is 123456

**Remark: Please remember the new password, because most of the instruction need the password to set**

## 5.6 Authorization

There are only 5 numbers able to be authorized.

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5.6.1 Send SMS "**admin+password+#+cell phone number**" to set up a authorized number. The other authorized numbers should be set by the first authorized number. If the number is successfully authorized, th unit will reply “**admin ok!**” in SMS.

5.6.2 Send SMS "**noadmin+password+#+authorized number**" to delete the authorized number.

5.6.3 For roaming purpose, you have to add your country code ahead of the cell phone number, for example, please send admin123456 008613322221111 to tracker to set 13322221111 as an authorized number.

## 5.7 Real-time polling

5.7.1 If there is no authorized number, when any number dials up the unit, it will report a Geo-info; If there is already an authorized number, then it will not respond when an unauthorized number calls it up.

5.7.2 When an authorized number dials up the unit, it will hang up and report a real-time Geo-info as below:

<http://maps.google.com/?q=22.723210N,113.901408E>  
Speed:000.0km/h  
Time:09:45:51  
Date:10/01/03  
Signal:M Bat:97%  
IMEI:354776034773389

## 5.8 Auto Track

Report a Geo-info at 30s intervals to the authorized numbers for 15 times:

5.8.1 Set up: Send SMS "**at30sum15**" to the unit, it will report the Geo-info at 30s intervals for 15 times.(s: second, m: minute, h: hour). The setting must be in 20 digits and at maximum 999999 in value.

5.8.2 Send SMS "**at30sum0**" to the unit, it will report the Geo-info at 30s intervals for the unlimited times

Remark: you can set the time slot by yourself.

5.8.3 Cancel: Send "**noat+password**" to delete the "auto track"

**Remark: the interval must be between 20s and 999999s**

## 5.9 Voice Surveillance

In this mode, the user can dial up the unit to monitor the voice (please refer to **5.10** for instruction).

## 5.10 Modes switch between "track" and "monitor"

5.10.1. The default mode is "track".

5.10.2. Send SMS "**monitor+password**" to the unit, and it will reply "**monitor ok!**" and switch to "monitor" mode.

5.10.3. Send SMS "**tracker+password**" to the unit, it will reply "**tracker ok!**" and restore to "track" mode.

## 5.11 Geo-fence

Set up a geo-fence for the unit to restrict its movements within a district. The unit will send the message to the authorized numbers when it breaches the district.

5.11.1 Set up: When the unit stays immobile in a place for 3-10 minutes, the user can Send SMS "**stockade+password++ the smallest longitude,latitude;the largest longitude,latitude**" to unit to set the restricted district. In case of breach, it will send SMS "**stockade!+ the smallest longitude,latitude;the largest longitude,latitude**" to the authorized numbers.

Remark : The first longitude& latitude is coordinate of the top left corner of the Geo-fence, while the second longitude&latitude is the coordinate of the bottom right corner. It will alarm at 3minutes intervals for 1 time

5.11.2 Cancel: Send SMS "**nostockade+password**" to deactivate this function.

This function will be out of effect after the unit moves outside the district.

## 5.12 Movement alert

5.12.1 Set up: When the unit stays immobile in a place for 3-10 minutes, the user can send SMS "**move+password**" to the unit, then the unit will reply "**move ok!**". In case of such a movement, it will send SMS "Move" along with a Geo-info to the authorized numbers. It will alarm at 3minutes intervals for 1 time.

5.12.2 Cancel: Send SMS "**nomove+password**" to deactivate the movement alert.

**Remark: This function will be out of effect after the unit moves outside the district.**

## 5.13 Overspeed alert:

5.13.1 Set up: Send SMS "**speed+password+#+080**" to the unit (suppose the limit speed is 80km/h), and it will reply "**speed ok!**". When the target moves exceeding 80 km/h, the unit will send SMS speed+080!+Geo-info to the authorized numbers. at 3 minutes intervals for 1 time

5.13.2 Cancel: Send SMS "**nospeed+password**" to deactivate the overspeed alert

Remark: It is recommended that the speeding alert is set at no less than 50km/h ,as below this rate clouds or other factors many influence the GPS signal

## 5.14 IMEI checking:

Send SMS "**imei+password**" to the unit to check the IMEI number.

## 5.15 SOS button

Press the SOS for 3 second, it will send "**help me !+ Geo-info**" to all the authorized numbers every 3 minutes.

Send the SMS"**help me!**" to the device to cancel the SOS alert,but it will not reply the set ok

## 5.16 Low battery alert

It begins to alert when it is 3.7V and sends you SMS in 30 minutes interval.

SMS format: low battery+Geo-info.

## 5.17 Restart the tracker.

Send SMS "**reboot+password**" to the tracker. For example"**reboot123456**".The tracker will be restarted.



## 5.18 Set number in a online positioning platform

Add the number on the online positioning platform for tracking. Adding to the special platform, send SMS "**number+tracker number**" to the tracker, and will reply set number ok

for example "number13500001111". need the platform have the function.

## 5.19 Modes switch between "telephone" and "web"

**5.19.1** For sending GPS data to IP address:

Set up: Send SMS "**web + password**" to device.

if set successfully, the device will reply SMS "**set web ok**".

After this, you can call the tracker. The tracker will hang up the phone and report the GPS data to IP address.

**5.19.2** For sending GPS data to telephone:

Set up: Send SMS "**telephone + password**" to device.

if set successfully, the device will reply "**set telephone ok**".

And then, the device will send GPS data to your telephone by SMS.

Remark: The default is sending the GPS data to the telephone.

## 5.20 GPRS setting

In order to use GPRS function, the user needs to set IP, Port and APN ( access point name ) by sending SMS commands.

**5.20.1** Set an IP address and port:

Setup: Send SMS "**ip+ip address+port+port number**". If setup successful, the tracker will reply SMS " **set ip address and port ok!** "

Cancel: Send SMS "**noadminip+password**"

### 5.20.2 Set APN

Send SMS "**apn+password+#+apn name (local country apn name )**" If setup successful, the tracker will reply SMS "**set apn ok**".

P.S. The old APN will be invalid when you set a new APN.

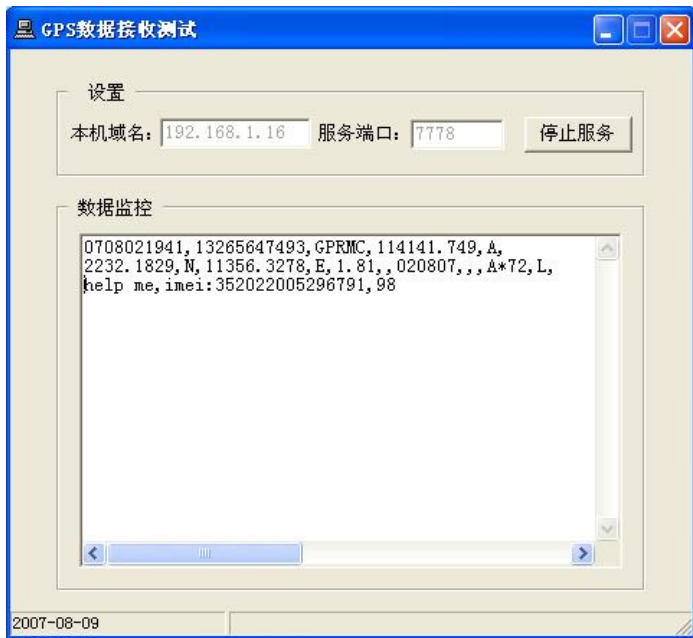
**5.20.3** Setup: Send SMS " **user+password+APN USER NAME+#+APN PASSWORD**" to set the APN user name and password

As soon as the IP & Port & APN are set up, the user can make a call or send SMS to tracker. The tracker will hang up the telephone and report the coordinates to IP address.

The message sent by tracker to IP address is as following:

Serial number + authorized number + GPRMC + GPS signal indicator + command + IMEI number + CRC16 checksum.

For example, it will send GPS coordinates as below illustrated



## 5.21Set Time

In order to make the time as the same with the user country,please send SMS command "**zone+password+ #+ time zone**". For example,if user country time is GMT+8 (password is123456 )then send" **zone123456#8** "to the device. If user country time is GMT-6,then send"zone123456 #-6"to device. The device will reply SMS"set time zone ok".

**Remark::there is a space between time and zone ,the time zone is 3 digits**

## 6 Cautions

**Please comply with the instructions to extend the unit life:**

1. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry.
2. Don't use & store the unit in dusty places.
3. Don't put the unit in overheated or overcooled places.
4. Handle carefully. Don't vibrate or shake it violently.
5. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.
6. Don't paint the unit, this may cause some foreign materials left in between the parts.
7. Don't disassemble or refit the unit.
8. Please use the battery and charger provided by manufacturer. Using other batteries and chargers will cause unwanted situation.
9. Don't dismount the antenna randomly, or use other antennas. This may interfere the transmission, and increase the radiation as well.

## 7 Faults & The solutions

Faults	Solution
Startup Fail	Check the battery and see if it is fully charged or correctly installed.
Hangup Fail	In existence of an authorized number, an unauthorized number dials up the unit. Please initialize the unit and re-set up the authorized numbers.
Monitor Fail	Check if the authorized number is setup or in the coverage of signals.
Location report in digits of zeros.	Don't use it in the place beyond reach of signals. Place the unit outdoors, especially when starting it up.

## 8 Command

N o	FUNCTION	SMS	SMSREPLY	CHAP
1	Intialition	begin123456	begin ok	5.4
2	Change password	password123456#666888	Change password ok	5.5.1
	Resume password	resumepassword	resume password,password is 123456	5.5.3
3	Add in number	admin123456#13511113333	admin ok	5.6.2
	Delete number	noadmin123456#13511113333	no admin ok	5.6.3
4	Auto tracking	at30sum15	auto track set ok	5.8.1
	Auto tracking	at30sum0	auto track set ok	5.8.2
	Cancel auto track	noat123456	cancel auto track ok	5.8.3
5	Monitor mode	monitor123456	monitor ok	5.10.2
6	Tracking mode	tracker123456	tracker ok	5.10.3
7	Geo-fence	stockade123456#22.100000N,113.100000E;22.900000N,113.900000E	Stockade ok	5.11.1
	Cancel geo-fence	nostockade123456	no stockade ok	5.11.2
8	Movement alert	move123456	move ok	5.12.1
	Cancel movement alert	nomove123456	cancel move ok	5.12.2
9	Overspeed alert	speed123456#080	speedok	5.13.1
	Cancel overspeed alert	nospeed123456	cancel speed ok	5.13.2
10	Imei checking	imei123456		5.14
11	SOS alert		help me!	5.15
12	Restart the tracker	reboot123456		5.17

13	Add number into platform	number13500001111	set number ok	5.18
14	Web mode	web123456	set web ok	5.19.1
15	Telephone mode	telephone123456	set telephone ok	5.19.2
	GPRS setting	ip116.255.131.50port8500	set ip address and port ok	5.20.1
16	Set APN	apn123456 #cmnet	set APN ok	5.20.2
17	Set APN user name and password	user123456#cmnet#cmnet	Set apn user ok	5.20.3
18	Set time	zone123456#TIME ZONE	Set zone ok	5.21

Remark:

- 1.123456 is the device password, 1351111333 is the authorized number, 13500001111 is the device terminal track number
- 2.The first using ,please put the device to the outdoor which have the power GPS signal ,then begin to track after two minutes.
- 3.The English capital letter and lower-case represent the command , English capital letter is the setting content ,please using lower -case to edit all commands by telephone.